

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Peter de Groot et al.  
 Serial No. : 10/053,106  
 Filed : November 2, 2001  
 Title : HEIGHT SCANNING INTERFEROMETRY METHOD AND APPARATUS  
 INCLUDING PHASE GAP ANALYSIS

Commissioner for Patents  
 Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449, copies of which are enclosed.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 5/28/02

Marc M. Wefers\*  
 Marc M. Wefers\* for  
 Eric L. Pahl  
 Reg. No. 32,590

Fish & Richardson P.C.  
 225 Franklin Street  
 Boston, Massachusetts 02110-2804  
 Telephone: (617) 542-5070  
 Facsimile: (617) 542-8906

\*See attached document certifying that Marc M. Wefers has limited recognition to practice before the U.S. Patent and Trademark Office under 37 C.F.R. § 10.9(b).

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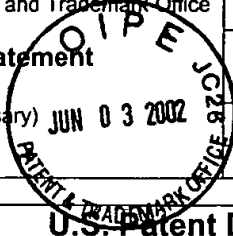
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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 09712-132001	Application No. 10/053,106
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Peter de Groot et al.	
		Filing Date November 2, 2001	Group Art Unit



### U.S. Patent Documents

Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,195,168 B1	02/2001	De Lega et. al.	356	497	
	AB	5,398,113	03/1995	De Groot	356	360	
	AC	5,784,164	07/1998	Deck et. al.	356	511	
	AD	5,402,234	03/1995	Deck	356	497	
	AE	5,471,303	11/1995	Ai et. al.	356	497	

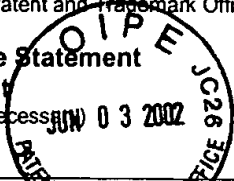
### Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AF							
	AG							
	AH							
	AI							
	AJ							

### Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AK	P. de Groot and Leslie Deck, "Surface profiling by analysis of white-light interferograms in the spatial frequency domain," J. Mod. Opt. 42(2), 389-401 (1995).
	AL	T. Dresel, G. Hausler and H. Venzke, "Three-dimensional sensing of rough surfaces by coherence radar," Appl. Opt. 31(7), 919-925 (1992).
	AM	Gordon S. Kino and Stanley S. C. Chim, "Mirau correlation microscope," Appl. Opt. 29(26), 3775-3783 (1990).
	AN	Kieran G. Larkin, "Efficient nonlinear algorithm for envelope detection in white light interferometry," J. Opt. Soc. Am. A 4, 832- 843 (1996)
	AO	M.-C. Park and S.-W. Kim, "Direct quadratic polynomial fitting for fringe peak detection of white light scanning interferograms", Opt. Eng. 39(4) 952-959 (2000)
	AP	A. Harasaki, J. Schmit and J. C. Wyant, "Improved vertical-scanning interferometry", Appl. Opt. 39(39), 2107-2115 (2000)
	AQ	B.L. Danielson and C.Y. Boisrobert, "Absolute optical ranging using low coherence interferometry," Appl. Opt. 30(21), 2975-2979 (1991)
	AR	A. Harasaki and J. C. Wyant, "Fringe modulation skewing effect in white-light vertical scanning interferometry," Appl. Opt. 39(13), 2101-2106 (2000).

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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		Applicant Peter de Groot et al.	
		Filing Date November 2, 2001	Group Art Unit

	AS	D. C. Ghiglia and J. Pritt, "Two-dimensional phase unwrapping: Theory, algorithms and software" (John Wiley & Sons, Inc., New York, 1998), p. 93.
	AT	J. Schwider and L. Zhou, "Dispersive interferometric profilometer," Opt. Lett. 19(13), 995-997 (1994).
	AU	S.W. Kim and G.H. Kim, "Thickness-profile measurement of transparent thin-film layers by white-light scanning interferometry," Appl. Opt. 38(28) (1999).
	AV	M. Davidson, K. Kaufman, and I. Mazar, "The coherence probe microscope," Solid State Technology, 30(9) 57-59 (1987).
	AW	J.C. Wyant, "How to extend interferometry for rough-surface tests," Laser Focus World, 131-135 (September 1993).
	AX	P. de Groot and L. Deck, "Three-dimensional imaging by sub-Nyquist sampling of white-light interferograms," Opt. Lett. 18(17), 1462-1464 (1993).
	AY	P. Sandoz, R. Devillers, and A. Plata, "Unambiguous profilometry by fringe-order identification in white-light phase shifting interferometry," J. Mod. Opt. 44, 519-534 (1997).
	AZ	P.J. Caber, S.J. Martinek, and R.J. Niemann, "A new interferometric profiler for smooth and rough surfaces," SPIE 2088, 195-203 (1993).
	AAA	A. Pfortner and J. Schwider, "Dispersion error in white-light Linnik interferometers and its implications for evaluation procedures," Appl. Opt. 40(34) 6223-6228 (2001).
	ABB	P. de Groot, X. Colonna de Lega, J. Kramer, and M. Turzhitsky, "High precision surface inspection on the microscale by broadband interferometry", Proc. Fringe 2001, The 4 <sup>th</sup> International Workshop on Automatic Processing of Fringe Patterns, Wolfgang Osten and Werner Juptner Eds., Elsevier, pp. 333-340 (2001).
	ACC	L. Deck and P. de Groot, "High-speed non-contact profiler based on scanning white light interferometry," Appl. Opt. 33(31), 7334-7338 (November 1, 1994).

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Expires: January 7, 2003

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